Mission Planning Systems Engineering & Integration Contract (SEIC)

SEIC Industry Day
October 15, 2003

NORTHROP GRUMMAN
Information Technology

Agenda

- Short Term SEIC Organization
- Short Term SEIC Tasking
  - Requirements Analysis
  - Architecture/Design
  - System Integration/Test
  - Special Studies

SEIC Business Overview - Organization

Gov't SEIC PM
Lt Sam Deaton

JEMT

SEIT

Gov't

Air Force Chief Architect	Navy Chief Architect	Army Chief Architect	SOF Chief Architect
Scott Gray	David Pearson	Hunter Matthews	David Iverson
Air Force Orgs	**Navy Orgs**	**Army Orgs**	**SOF Orgs**
Mission Planning SPO (N, S, & W)	PMA-233, NAWC, SPAWAR	PEO(AVN), SED	TBD

SEIC

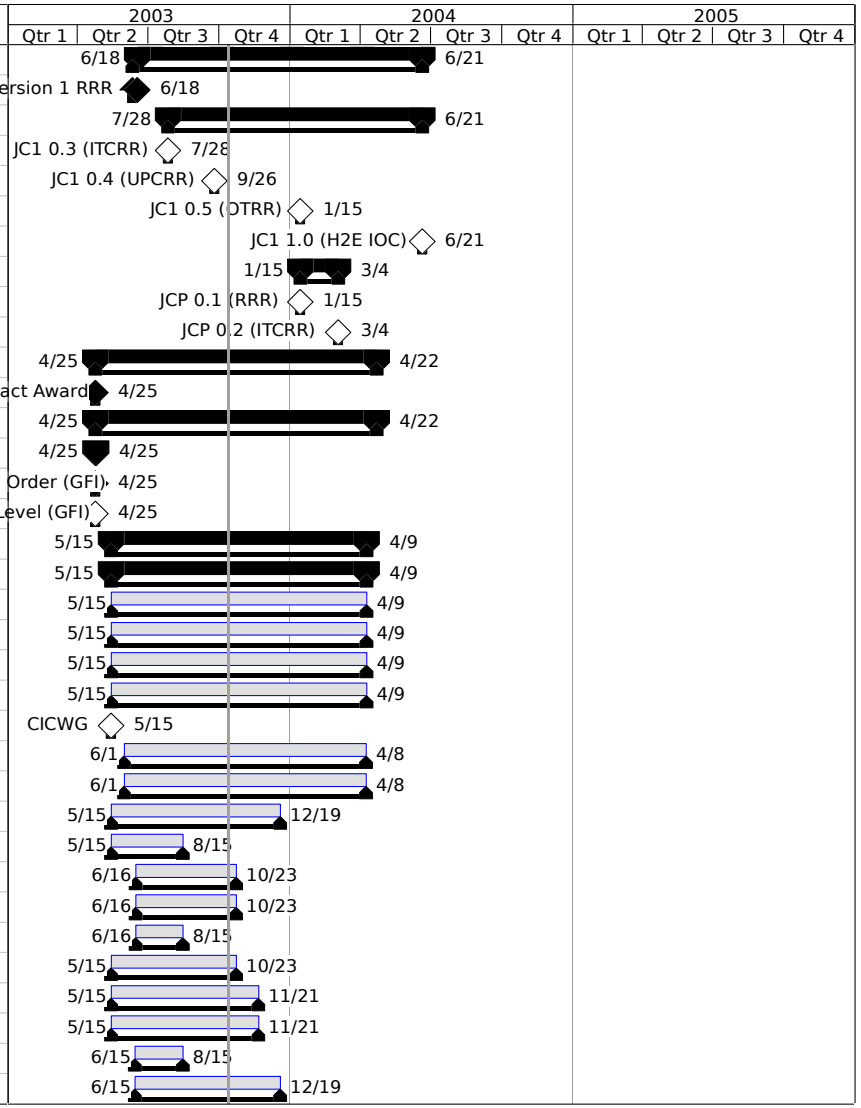
SEIC PM
Mike Kuriki, NGIT

NGIT	Boeing	BAE
Mike Kuriki	Randy Wing	Bill Wright

Tybrin	Titan (Jaycor)
Sam Parsons	Larry Griggs

SEIC-ST Integrated Master Schedule

ID	Task Name	Start	Finish
1	**JMPS Framework**	**6/18/03**	**6/21/04**
2	JMPS Version 1 RRR	6/18/03	6/18/03
3	**JMPS Combat 1 "Working Dates"**	**7/28/03**	**6/21/04**
4	JC1 0.3 (ITCRR)	7/28/03	7/28/03
5	JC1 0.4 (UPCRR)	9/26/03	9/26/03
6	JC1 0.5 (OTRR)	1/15/04	1/15/04
7	JC1 1.0 (H2E IOC)	6/21/04	6/21/04
8	**JMPS JCP**	**1/15/04**	**3/4/04**
9	JCP 0.1 (RRR)	1/15/04	1/15/04
10	JCP 0.2 (ITCRR)	3/4/04	3/4/04
11	**JMPS Systems Engineering & Integration Contract**	**4/25/03**	**4/22/04**
12	Contract Award	4/25/03	4/25/03
13	**Systems Engineering**	**4/25/03**	**4/22/04**
14	**Define JMPE Requirements**	**4/25/03**	**4/25/03**
15	Inventory CCRD To Determine Order (G		
16	Refine CCRDs To Next Level (GFI)		
17	**Requirements Analysis**	**5/15/03**	**4/9/04**
18	**Requirements IPT**	**5/15/03**	**4/9/04**
19	Requirements Package Review	5/15/03	4/9/04
20	Architecture Review	5/15/03	4/9/04
21	Manage Master Interdependency Matrix	5/15/03	4/9/04
22	ICD/IRS Maintenance	5/15/03	4/9/04
23	CICWG	5/15/03	5/15/03
24	Change Tracking	6/1/03	4/8/04
25	Requirements Traceability	6/1/03	4/8/04
26	Auto Routing/LO	5/15/03	12/19/03
27	Weather Planning (1)	5/15/03	8/15/03
28	Sensor Prediction (1)	6/16/03	10/23/03
29	Intel Planning (2)	6/16/03	10/23/03
30	Query and Process Imagery (2)	6/16/03	8/15/03
31	Electronic Warfare Planning (2)	5/15/03	10/23/03
32	Access Target Information (2)	5/15/03	11/21/03
33	Mission Rehearsal	5/15/03	11/21/03
34	GATM	6/15/03	8/15/03
35	Collaborative Planning	6/15/03	12/19/03



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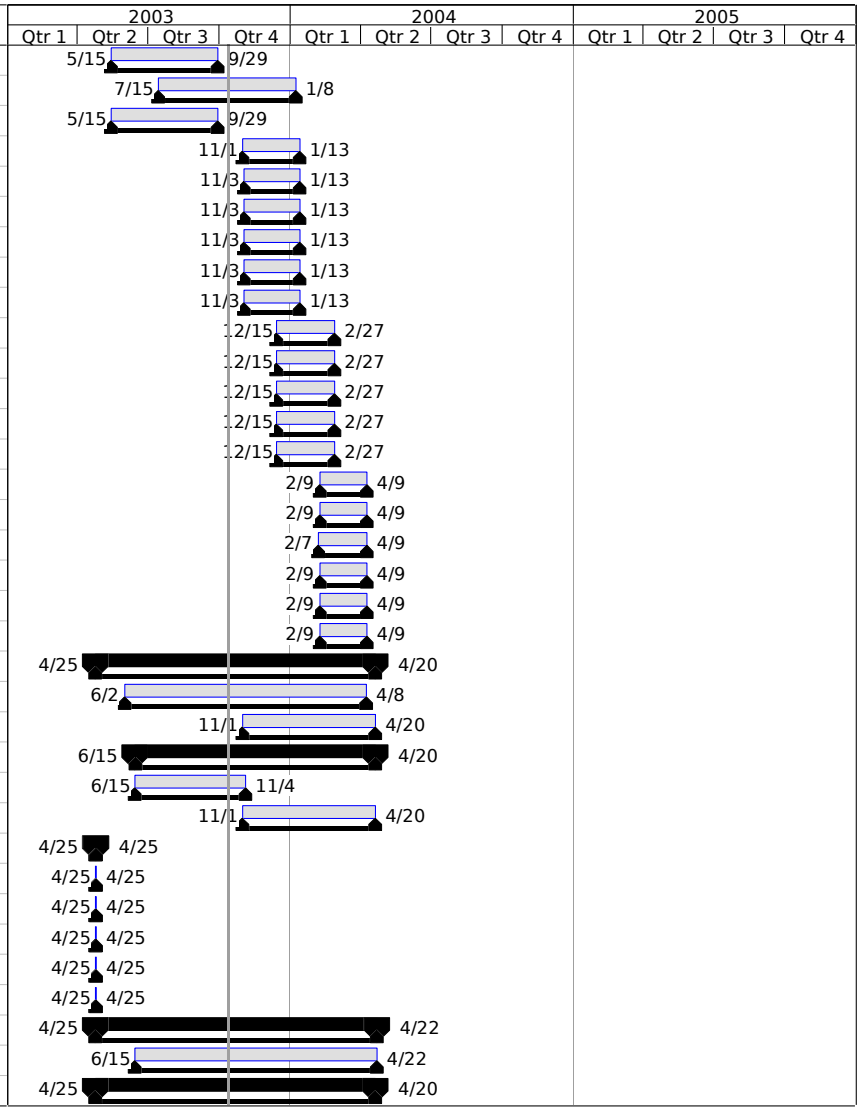
SEIC-ST Integrated Master Schedule

ID	Task Name	Start	Finish
36	Web Enabling	5/15/03	9/29/03
37	Enhanced Basic Mission Planning	7/15/03	1/8/04
38	**Framework Requirements Analysis**	5/15/03	9/29/03
39	Security	11/1/03	1/13/04
40	Refueling	11/3/03	1/13/04
41	Pol/Diplomatic Clearance	11/3/03	1/13/04
42	Customized MPE (Preferences)	11/3/03	1/13/04
43	**Sensor Employment Planning**	11/3/03	1/13/04
44	Strategic Planning	11/3/03	1/13/04
45	Communication Planning.	12/15/03	2/27/04
46	Post Mission Processing	12/15/03	2/27/04
47	Generate Mission Materials	12/15/03	2/27/04
48	Archive Mission Data	12/15/03	2/27/04
49	Electronic Reference Library	12/15/03	2/27/04
50	Crypto Keys	2/9/04	4/9/04
51	Element Deconfliction	2/9/04	4/9/04
52	Generate Mission Tasking/Parsing	2/7/04	4/9/04
53	**Process Data/Dataloads**	2/9/04	4/9/04
54	Access Asset Data?	2/9/04	4/9/04
55	Terrain Planning?	2/9/04	4/9/04
56	**Architecture & Design**	**4/25/03**	**4/20/04**
57	Enhanced External System Interfaces	6/2/03	4/8/04
58	Technical Design Standards	11/1/03	4/20/04
59	**Performance Working Group**	**6/15/03**	**4/20/04**
60	Mapping Of KPPs To Components	6/15/03	11/4/03
61	Recommended Performance Enhancements	11/1/03	4/20/04
62	**Developer Technical Guidance**	**4/25/03**	**4/25/03**
63	Design Evaluations (Guidelines, Checklists)	4/25/03	4/25/03
64	Programmer's Guide	4/25/03	4/25/03
65	COE & Logo Compliance Guidelines	4/25/03	4/25/03
66	Search Tool	4/25/03	4/25/03
67	I/F Registration Tool	4/25/03	4/25/03
68	**System Integration & Test**	**4/25/03**	**4/22/04**
69	JMPS Enterprise Process Development	6/15/03	4/22/04
70	**Test Planning**	**4/25/03**	**4/20/04**



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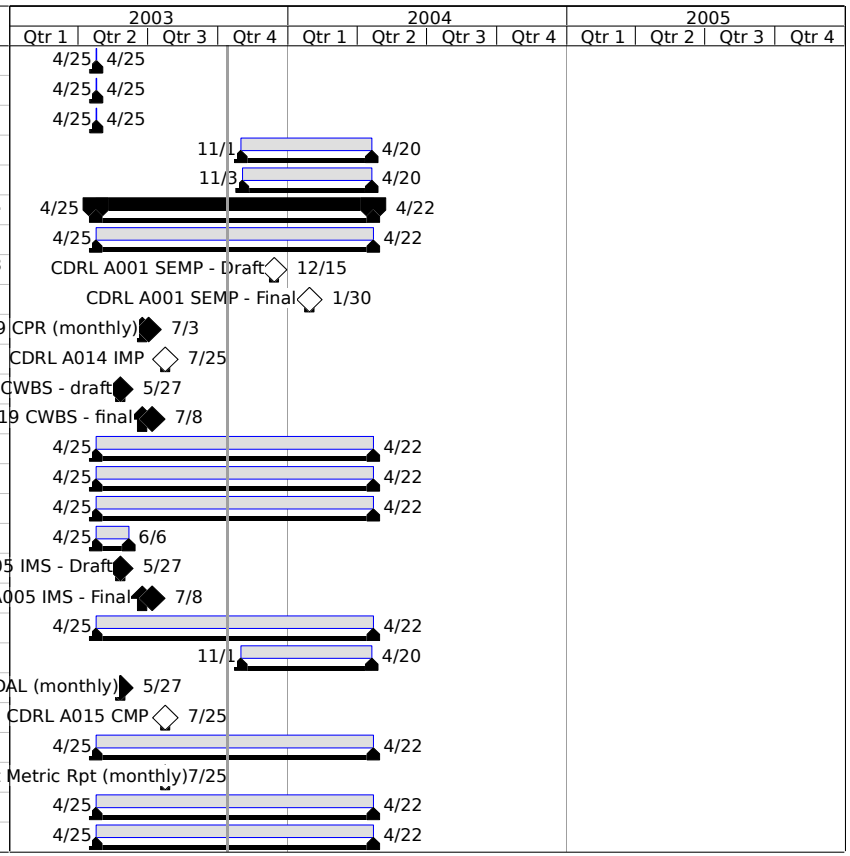
SEIC-ST Integrated Master Schedule

ID	Task Name	Start	Finish
71	Component Level Test Methodology	4/25/03	4/25/03
72	Develop Generic Test Process	4/25/03	4/25/03
73	Tailor Generic Test Process	4/25/03	4/25/03
74	Centralized Problem Reporting Process	11/1/03	4/20/04
75	Develop System Test Plans	11/3/03	4/20/04
76	**Program Management**	**4/25/03**	**4/22/04**
77	SEIC Program Management	4/25/03	4/22/04
78	CDRL A001 SEMP - Draft	12/15/03	12/15/03
79	CDRL A001 SEMP - Final	1/30/04	1/30/04
80	CDRL A009 CPR (monthly)	7/3/03	7/3/03
81	CDRL A014 IMP	7/25/03	7/25/03
82	CDRL A019 CWBS - draft	5/27/03	5/27/03
83	CDRL A019 CWBS - final	7/8/03	7/8/03
84	Risk Management	4/25/03	4/22/04
85	MPEMT & SEIT Support	4/25/03	4/22/04
86	Process Definition Support	4/25/03	4/22/04
87	Build JMPS Enterprise IMS	4/25/03	6/6/03
88	CDRL A005 IMS - Draft	5/27/03	5/27/03
89	CDRL A005 IMS - Final	7/8/03	7/8/03
90	Maintain JMPS Enterprise IMS	4/25/03	4/22/04
91	Configuration Management	11/1/03	4/20/04
92	CDRL A013 DAL (monthly)	5/27/03	5/27/03
93	CDRL A015 CMP	7/25/03	7/25/03
94	Management Metrics	4/25/03	4/22/04
95	CDRL A008 Management Metric Rpt (month	CDRL A008 Management Metric Rpt (monthly)	7/25
96	Knowledge Repository	4/25/03	4/22/04
97	Software Component Management	4/25/03	4/22/04



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SEIC-ST Tasking - Requirements Analysis

- **Produce Common Capability Requirements Packages**
  - **Define Common Capability Specification Template**
    - **Scope**
    - **Operational Overview**
    - **Capability Overview**
    - **Capability Prioritization**
    - **Design Constraints**
  - **Validate coverage of common requirements by CCs**
  - **Deconflict requirements between CCs**
  - **Identify dependencies between CCs**
  - **Produce CC Spec in coordination with Government teams**
  - **Update CCRDs**

SEIC-ST Tasking - Requirements Analysis

Near Term Common Capabilities

- **Weather** 08-01-03
- **GATM** 09/21/03
- **Sensor Prediction** 10/23/03
- **Query/Process Imagery** 10/24/03
- **Intel** 11/21/03
- **Mission Rehearsal** 11/21/03
- **Access Target Info** 11/21/03
- **Electronic Warfare Planning** 12/19/03
- **Autorouting** 12/19/03
- **Collaborative Planning** 12//19/03
- **Enhanced Basic Mission Planning** 01/08/04
- **Web Enabling** TBD

SEIC-ST Tasking - Requirements Analysis

- **Remaining Common Capabilities**
  - **Security 01/13/04**
  - **Refueling 01/13/04**
  - **Political/Diplomatic Clearances 01/13/04**
  - **Customized MPE (Preferences) 01/13/04**
  - **Sensor Employment Planning 01/13/04**
  - **Strategic Planning 01/13/04**
  - **Communications Planning 02/27/04**
  - **Post Mission Processing 02/27/04**
  - **Generate Mission Materials 02/27/04**
  - **Archive Mission Data 02/27/04**
  - **Electronic Reference Library 02/27/04**
  - **Crypto Keys 04/09/04**
  - **Element Deconfliction 04/09/04**
  - **Generate Mission Tasking/Parsing 04/09/04**

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SEIC-ST Tasking – Architecture/Design

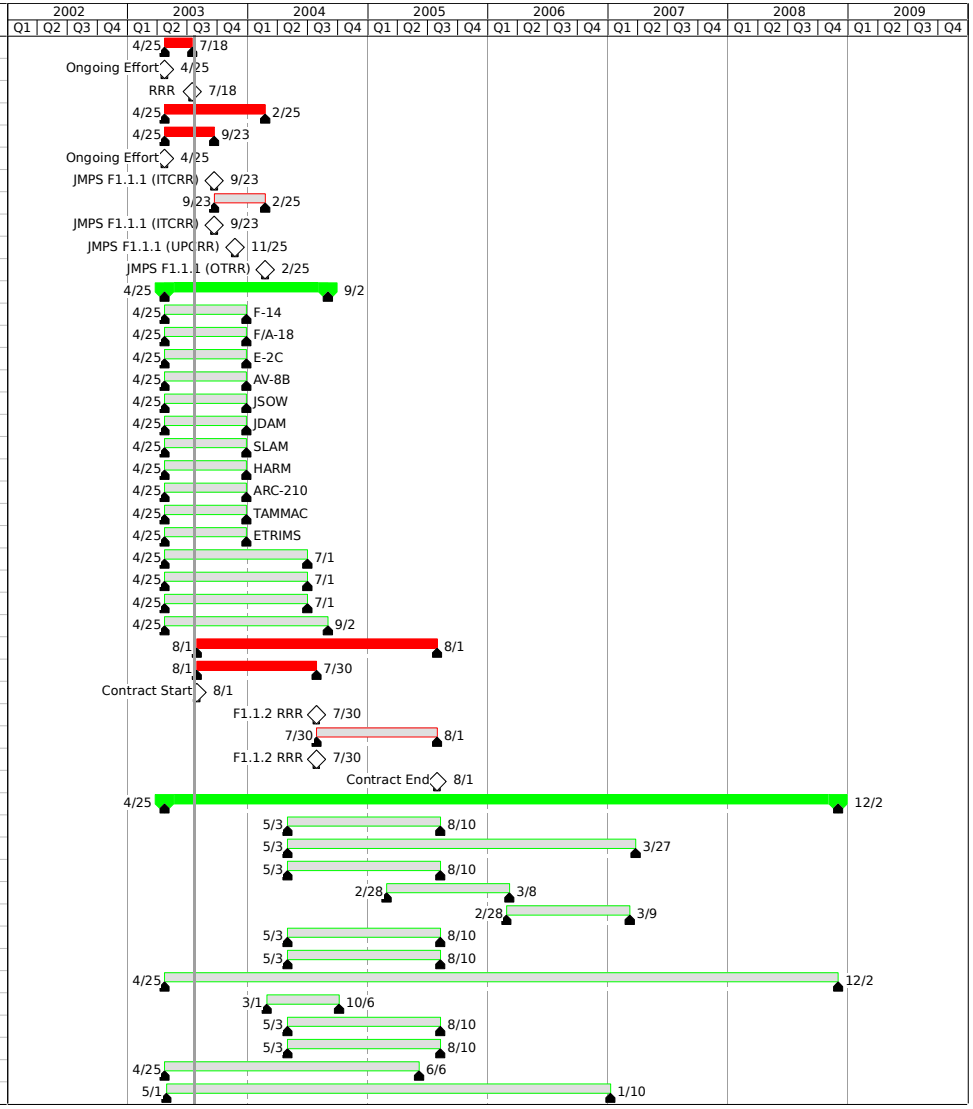
- **Support CC Requirements Analysis/Definition**
  - Will review CC architecture proposed by Requirements team
  - Architecture changes to existing components necessary to support CC will be reviewed
  - Design requirements for extensibility will be identified
  - Use of existing JMPS components will be identified
  - Candidate KPPs will be allocated to components
- **Establish JMPS Architecture Review Board**
  - On-going tasking would be to monitor common capability development to ensure compliance to JMPS architecture
- **Establish Performance WG**
  - Tasking includes monitoring overall JMPS performance as new common capabilities are added
- **Developer Technical Guidance**
  - Draft initial design standards, guidelines and checklists to be used in design evaluations
  - Begin work on developer support tools

SEIC-ST Tasking – System Integration/Test

- Produce Mission Planning Enterprise Integrated Master Schedule (IMS)
- Mission Planning Enterprise Process Definition
  - Mission Planning Enterprise Management Plan
  - Enterprise Decision Making
  - Enterprise IMS Generation & Maintenance
  - Framework Evolution/Technology Insertion Plan
  - Mission Planning Environment Assembly & Integration
  - Enterprise Requirements Definition
  - Enterprise Test Approach
  - Problem Report/Discrepancy Report Handling
  - Enterprise Configuration Management
  - Knowledge Management

Draft Enterprise Integrated Master Schedule

	Task Name	Start	Finish
1	JMPS F1.1.1 (Navy TAMPS on-the-boat)	**4/25/03**	**7/18/03**
2	Ongoing Effort	4/25/03	4/25/03
3	RRR	7/18/03	7/18/03
4	**JMPS F1.1.1 (Navy TAMPS off-the-boat)**	**4/25/03**	**2/25/04**
5	**F1.1.1 Development**	**4/25/03**	**9/23/03**
6	Ongoing Effort	4/25/03	4/25/03
7	JMPS F1.1.1 (ITCRR)	9/23/03	9/23/03
8	**F1.1.1 Maintenance**	**9/23/03**	**2/25/04**
9	JMPS F1.1.1 (ITCRR)	9/23/03	9/23/03
10	JMPS F1.1.1 (UPCRR)	11/25/03	11/25/03
11	JMPS F1.1.1 (OTRR)	2/25/04	2/25/04
12	**F1.1.1 Based UPCs**	**4/25/03**	**9/2/04**
13	**F-14**	4/25/03	12/29/03
14	**F/A-18**	4/25/03	12/29/03
15	**E-2C**	4/25/03	12/29/03
16	**AV-8B**	4/25/03	12/29/03
17	**JSOW**	4/25/03	12/29/03
18	**JDAM**	4/25/03	12/29/03
19	**SLAM**	4/25/03	12/29/03
20	**HARM**	4/25/03	12/29/03
21	**ARC-210**	4/25/03	12/29/03
22	**TAMMAC**	4/25/03	12/29/03
23	**ETRIMS**	4/25/03	12/29/03
24	**P-3**	4/25/03	7/1/04
25	**EA-6B**	4/25/03	7/1/04
26	**T-45**	4/25/03	7/1/04
27	**MV-22**	4/25/03	9/2/04
28	**JMPS F1.1.2 (Army)**	**8/1/03**	**8/1/05**
29	**F1.1.2 Development**	**8/1/03**	**7/30/04**
30	Contract Start	8/1/03	8/1/03
31	F1.1.2 RRR	7/30/04	7/30/04
32	**F1.1.2 Maintenance**	**7/30/04**	**8/1/05**
33	F1.1.2 RRR	7/30/04	7/30/04
34	Contract End	8/1/05	8/1/05
35	**ARMY PLATFORM UPCs**	**4/25/03**	**12/2/08**
36	**AH-64A Mod**	5/3/04	8/10/05
37	**AH-64D**	5/3/04	3/27/07
38	**Version 9 w/GATM**	5/3/04	8/10/05
39	**Version 10**	2/28/05	3/8/06
40	**JTRS Integration (MY III)**	2/28/06	3/9/07
41	**CH-47D w/GATM**	5/3/04	8/10/05
42	**UH-60A/L w/GATM**	5/3/04	8/10/05
43	**CH-47F**	4/25/03	12/2/08
44	**GATM**	3/1/04	10/6/04
45	**OH-58D KW CDS4 ph IIB**	5/3/04	8/10/05
46	**OH-58D KW CDS2**	5/3/04	8/10/05
47	**RAH-66**	4/25/03	6/6/05
48	**UH/HH-60M (UH-60Q/HH-60L)**	5/1/03	1/10/07



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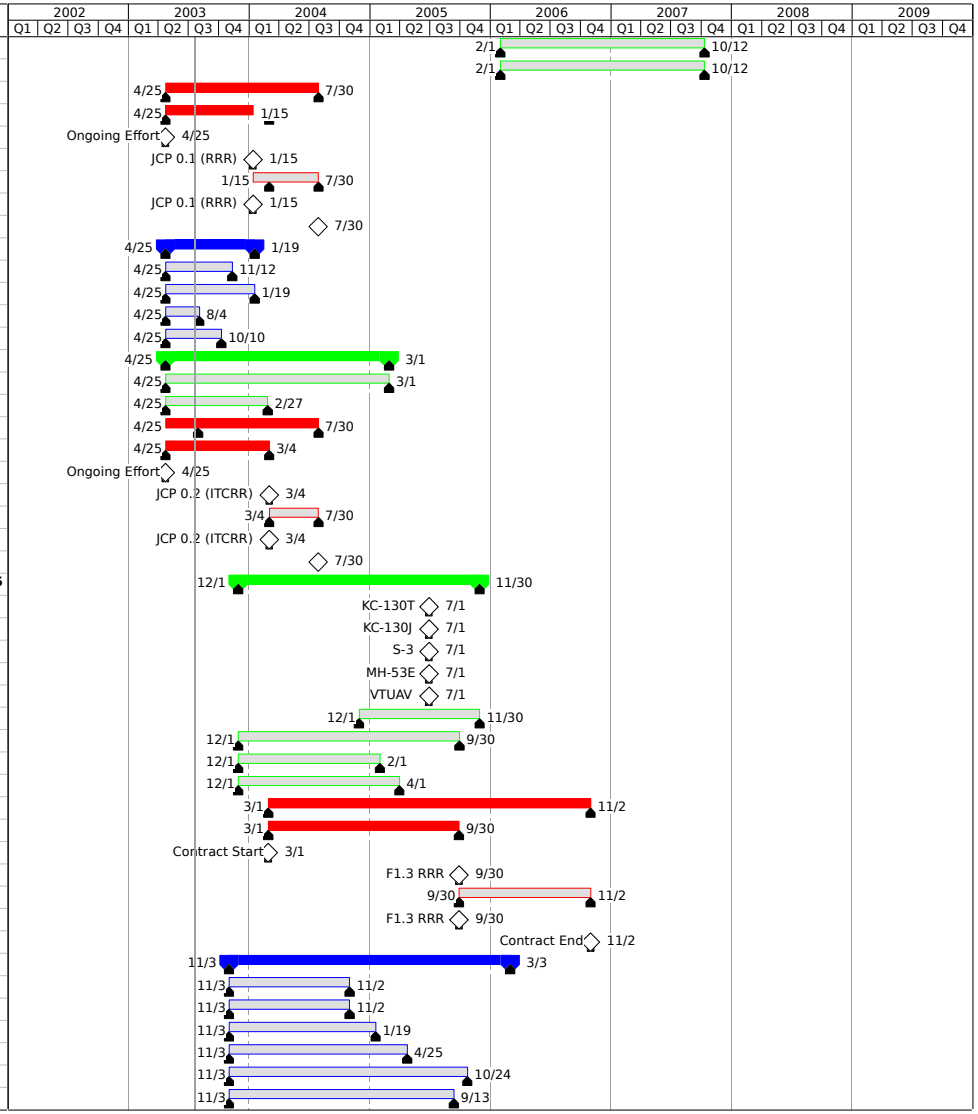
Draft Enterprise Integrated Master Schedule

	Task Name	Start	Finish
49	**TUAV**	2/1/06	10/12/07
50	**SUAV, UAV-L, UAV-M**	2/1/06	10/12/07
51	**JMPS F1.2.1 (JCP)**	**4/25/03**	**7/30/04**
52	**F1.2.1 Development**	**4/25/03**	**1/15/04**
53	Ongoing Effort	4/25/03	4/25/03
54	JCP 0.1 (RRR)	1/15/04	1/15/04
55	**F1.2.1 Maintenance**	**1/15/04**	**7/30/04**
56	JCP 0.1 (RRR)	1/15/04	1/15/04
57	Contract End	7/30/04	7/30/04
58	**F1.2.1 Based CCs**	**4/25/03**	**1/19/04**
59	Weapons Effectiveness Tool	4/25/03	11/12/03
60	Airdrop (Sprial 1)	4/25/03	1/19/04
61	CWDS	4/25/03	8/4/03
62	Vertical Profile	4/25/03	10/10/03
63	**F1.2.1 UPCs**	**4/25/03**	**3/1/05**
64	**F-15 MSIP, E**	4/25/03	3/1/05
65	**PGMPS (J, J, W, A)**	4/25/03	2/27/04
66	**JMPS F1.2.2 (Standalone)**	**4/25/03**	**7/30/04**
67	**F1.2.2 Development**	**4/25/03**	**3/4/04**
68	Ongoing Effort	4/25/03	4/25/03
69	JCP 0.2 (ITCRR)	3/4/04	3/4/04
70	**F1.2.2 Maintenance**	**3/4/04**	**7/30/04**
71	JCP 0.2 (ITCRR)	3/4/04	3/4/04
72	Contract End	7/30/04	7/30/04
73	**F1.2.2 UPCs**	**12/1/03**	**11/30/05**
74	**KC-130T**	7/1/05	7/1/05
75	**KC-130J**	7/1/05	7/1/05
76	**S-3**	7/1/05	7/1/05
77	**MH-53E**	7/1/05	7/1/05
78	**VTUAV**	7/1/05	7/1/05
79	**Predator**	12/1/04	11/30/05
80	**U-2**	12/1/03	9/30/05
81	**RC-135**	12/1/03	2/1/05
82	**HH-60**	12/1/03	4/1/05
83	**JMPS F1.3 (AR Spiral 0, Common 3D Map I/F, Merge F1.1.2 & F1.2.2**	**3/1/04**	**11/2/06**
84	**F1.3 Development**	**3/1/04**	**9/30/05**
85	Contract Start	3/1/04	3/1/04
86	F1.3 RRR	9/30/05	9/30/05
87	**F1.3 Maintenance**	**9/30/05**	**11/2/06**
88	F1.3 RRR	9/30/05	9/30/05
89	Contract End	11/2/06	11/2/06
90	**F1.3 Based CCs**	**11/3/03**	**3/3/06**
91	Enhanced Basic Mission Planning	11/3/03	11/2/04
92	Intelligence Planning	11/3/03	11/2/04
93	Mission Rehearsal	11/3/03	1/19/05
94	EW Planning	11/3/03	4/25/05
95	Query/Process Imagery	11/3/03	10/24/05
96	Collaborative Planning	11/3/03	9/13/05



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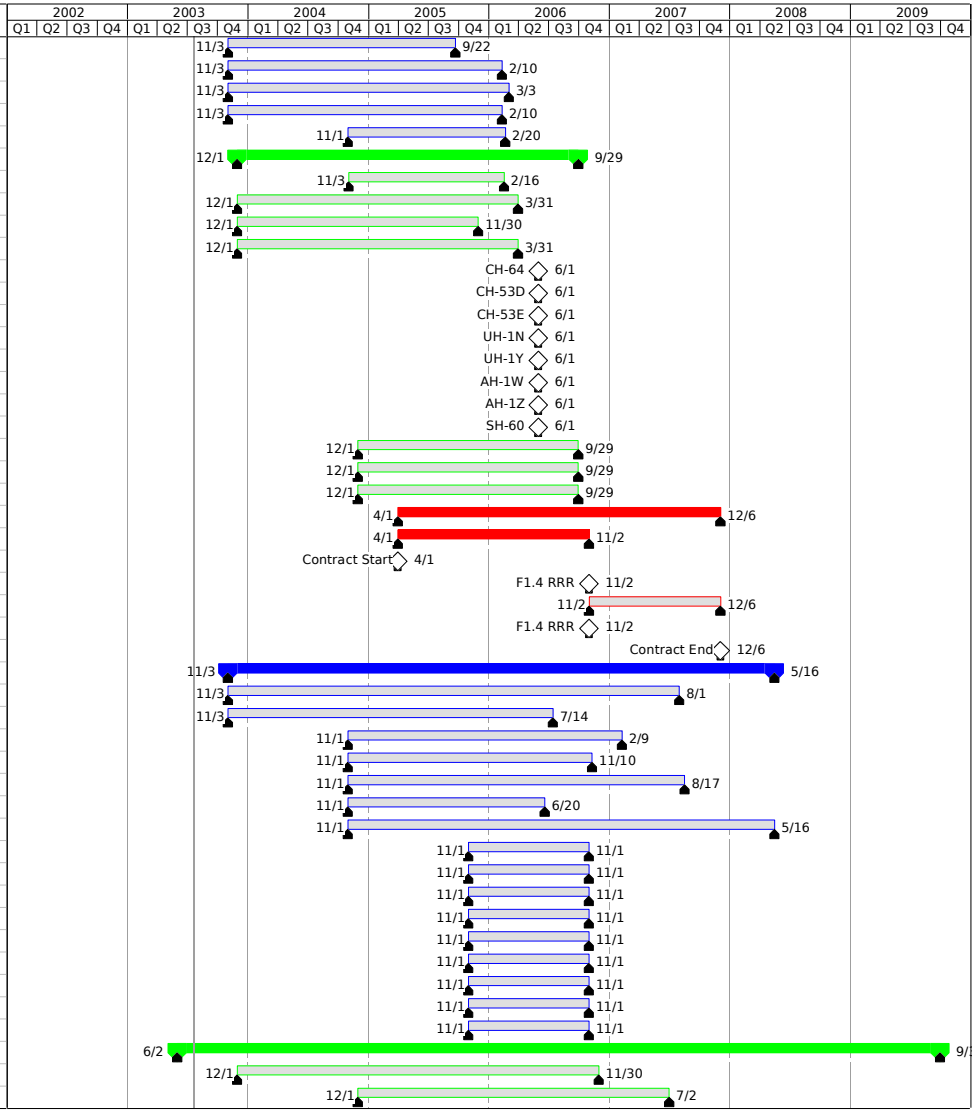
Draft Enterprise Integrated Master Schedule

	Task Name	Start	Finish
97	Aided Target Information	11/3/03	9/22/05
98	GATM	11/3/03	2/10/06
99	Sensor Predictions	11/3/03	3/3/06
100	Weather/Environ Planning	11/3/03	2/10/06
101	Customized MPE	11/1/04	2/20/06
102	**F1.3 Based UPCs**	**12/1/03**	**9/29/06**
103	**PGMPS (SDB Phase II)**	11/3/04	2/16/06
104	**A-10**	12/1/03	3/31/06
105	**F-16 Blk 30**	12/1/03	11/30/05
106	**F-22**	12/1/03	3/31/06
107	**CH-64**	6/1/06	6/1/06
108	**CH-53D**	6/1/06	6/1/06
109	**CH-53E**	6/1/06	6/1/06
110	**UH-1N**	6/1/06	6/1/06
111	**UH-1Y**	6/1/06	6/1/06
112	**AH-1W**	6/1/06	6/1/06
113	**AH-1Z**	6/1/06	6/1/06
114	**SH-60**	6/1/06	6/1/06
115	**TASM Tanker**	12/1/04	9/29/06
116	**TASM Airlift**	12/1/04	9/29/06
117	**TASM Special Mission**	12/1/04	9/29/06
118	**JMPS F1.4**	**4/1/05**	**12/6/07**
119	**F1.4 Development**	**4/1/05**	**11/2/06**
120	Contract Start	4/1/05	4/1/05
121	F1.4 RRR	11/2/06	11/2/06
122	**F1.4 Maintenance**	**11/2/06**	**12/6/07**
123	F1.4 RRR	11/2/06	11/2/06
124	Contract End	12/6/07	12/6/07
125	**F1.4 Based CCs**	**11/3/03**	**5/16/08**
126	Autorouting	11/3/03	8/1/07
127	Web Enabling	11/3/03	7/14/06
128	Security	11/1/04	2/9/07
129	Strategic Planning	11/1/04	11/10/06
130	Refueling	11/1/04	8/17/07
131	Political/Diplomatic Clearances	11/1/04	6/20/06
132	Sensor Employment Plng	11/1/04	5/16/08
133	Communications Planning	11/1/05	11/1/06
134	Element Deconfliction	11/1/05	11/1/06
135	Crypto Keys/Crypto	11/1/05	11/1/06
136	Post Mission Processing	11/1/05	11/1/06
137	Archive Mission Data	11/1/05	11/1/06
138	Electronic Reference Library	11/1/05	11/1/06
139	Generate Mission Materials	11/1/05	11/1/06
140	Generate Mission Tasking/Parsing	11/1/05	11/1/06
141	Process Data/Dataloads	11/1/05	11/1/06
142	**F1.4 Based UPCs**	**6/2/03**	**9/30/09**
143	**F-16 Blk 40/50**	12/1/03	11/30/06
144	**B-1**	12/1/04	7/2/07



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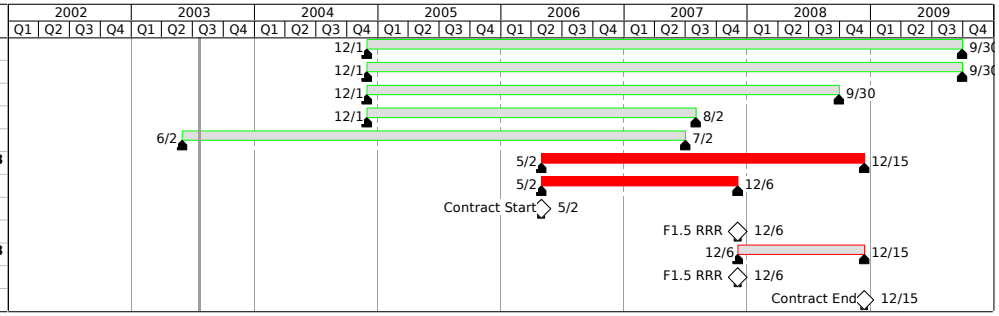
Draft Enterprise Integrated Master Schedule

ID	Task Name	Start	Finish
145	B-2	12/1/04	9/30/09
146	B-52	12/1/04	9/30/09
147	F-117	12/1/04	9/30/08
148	Global Hawk	12/1/04	8/2/07
149	JASSM	6/2/03	7/2/07
150	JMPS F1.5	**5/2/06**	**12/15/08**
151	F1.5 Development	**5/2/06**	**12/6/07**
152	Contract Start	5/2/06	5/2/06
153	F1.5 RRR	12/6/07	12/6/07
154	F1.5 Maintenance	**12/6/07**	**12/15/08**
155	F1.5 RRR	12/6/07	12/6/07
156	Contract End	12/15/08	12/15/08



NORTHROP GRUMMAN
Information Technology

SEIC-ST Tasking – Special Studies

- **Advanced Computer Flight Planning (ACFP) High-Performance Team (HPT)**
  - **Supported study to determine approaches to migrate ACFP to JMPS and to estimate cost of phased transition**
- **MPS Life Cycle Upgrade (LCU)**
  - **Performed study to define hardware requirements for development hardware suite for the LCU**
- **Synchronized Air Power Management (SAPM) Phase II**
  - **Performing gap analysis on workflow portion of SAPM to determine simplest approach to make it suitable for fielding**
- **Security Engineer**
  - **Providing a dedicated engineering resource to support MPS security issues**